

REMARKS

In response to the non-final Office Action of January 22, 2009, independent claims 1, 15, and 26 have been amended in a manner which is believed to particularly point out and distinctly claim the invention in view of the cited art. In particular, claim 1 has been amended to recite the feature "wherein said course of motion comprises dragging said dragging element from said predetermined position at which said dragging element is displayed to another position". This feature is disclosed in the application as filed, including in Figure 2a and the accompanying description in the paragraph bridging pages 11 and 12 of the application. Corresponding amendments have been made in independent apparatus claims 15 and 26.

Subject-Matter of the Invention

Exemplary embodiments of the present invention pertain to changing an orientation of a user interface via a course of motion. A dragging element (see for instance rectangular element 5 in Figure 2a of the application) is displayed on a user interface (unit 2 in Figure 2a). The dragging element is independent of content (see, for example, the displayed girl in Figure 2a) displayed on the user interface and is displayed at a predetermined position (for example, right upper corner) of the user interface. A course of motion that is performed on the user interface by dragging the dragging element is detected. The course of motion comprises dragging the dragging element from the predetermined position at which the dragging element is displayed (for example, right upper corner) to another position of the user interface (for example, right lower corner). An orientation of the user interface is then changed with respect to a physical device (for example, mobile phone 1 in Figure 2a) the user interface is integrated in according to the detected course of motion.

Exemplary embodiments of the present invention thus allow for a simple, intuitive and robust possibility to change an orientation of a display by grabbing a dragging element with a display interaction device (e.g., a stylus or finger pointing on a touch-screen, or a mouse or track-ball) and performing a course of motion with this dragging element. The dragging element is independent of the actual content displayed on the user interface, and is always displayed at the same position, so that it is easy to recognize and easy to locate. Introducing

a dedicated dragging element for user interface rotation and confining this dragging element to a predetermined position on the user interface combats unwanted change of the orientation of the display, because only upon grasping this dragging element and performing a course of motion with this dragging element, does rotation of the user interface occur. Furthermore, to further simplify the process and to make the process more robust, the position at which the dragging element is displayed is already the starting point of the course of motion that triggers the rotation of the user interface, so that it is in particular not necessary to move the dragging element to a specific position where performance of the course of motion starts.

Claim Rejections - 35 USC §103

At section 10, claims 1-4, 6, 9-12, 14-20, 23-26, and 33-40 are rejected under 35 USC §103(a) as unpatentable in view of US patent application publication 2003/0184525, Tsai, in view of US patent 5,345,543, Capps, et al (hereinafter Capps).

With regard to claim 1, the Office asserts that Tsai discloses a method for changing an orientation of a user interface comprising the actions recited in claim 1 except that Tsai does not explicitly disclose displaying a dragging element, wherein said dragging element is independent of content displayed on said user interface and is displayed at a predetermined position of said user interface. The Office asserts that Capps teaches a dragging element independent of content displayed on the user interface (in particular, small window 61 shown in Figure 3 and described at column 5, lines 1-14 of Capps). The Office further asserts that Capps teaches that the user can drag on the icon (small window) 61 to rotate the user interface and that it would have been obvious to a skilled artist at the time the invention was made to modify the teaching of Tsai to incorporate a dragging element displayed independent of the user interface and the dragging element used for rotating the user interface in view of Capps.

The Office presents similar arguments with respect to independent apparatus claims 15 and 26 as recited at pages 4-6 of the Official Action.

For the reasons presented below, applicant respectfully submits that independent claims 1, 15, and 26 are distinguished over Tsai in view of Capps.

With respect to the amended independent claims, it may be considered that Tsai discloses the features that a course of motion performed on a user interface is detected, and that an orientation of the user interface with respect to a physical device said user interface is integrated in is changed according to the detected course of motion.

Applicant is however of the view that the following features of the amended independent claims are not disclosed by Tsai:

- A) A dragging element is displayed on the user interface.
- B) The course of motion is performed by dragging the dragging element.
- C) The dragging element is independent of content displayed on said user interface.
- D) The dragging element is displayed at a predetermined position of said user interface.
- E) The course of motion comprises dragging said dragging element from said predetermined position at which said dragging element is displayed to another position of said user interface.

Even when hypothetically considering content elements displayed on the touch panel of Tsai as dragging elements according to feature A, and also hypothetically considering the dragging with a finger on the touch panel of Tsai as dragging of such a dragging element according to feature B (which hypothetical consideration is however strongly contested by the Applicant as already indicated above), Tsai would still fail to disclose features C, D and E.

Capps relates to a method for manipulating a selected object on a computer display of a computer system through the use of a pointing device and a screen based icon. The types of manipulation may include rotating and/or scaling the selected objects. The method includes the step of selecting a manipulating tool having a designated "axle" mark that serves as its center of rotation. The pointing device is directed towards a "handle" portion of the manipulating tool that is spaced apart from the axle to "grab" the handle. The pointing device is then used to rotate the handle about the axle. The computer system then manipulates the selected object by an amount that is a function of the angular distance that the handle is rotated about the axle.

Now, Capps, in Figures 3 and 4 and the according description in column 5, lines 1 to column 7, lines 7, discloses a hand crank icon 62 (see Figure 3) that is displayed at a predetermined position (in toolbox 61, which is displayed in response to selection of the

toolbar icon 50) and can be dragged out of the toolbox 61 by a stylus 38 (not shown). For instance, hand crank icon 62 can be dragged in a way that its crank axle 65 (see Figure 4) is over a rotation point of an object 56 that is to be rotated, for instance the object's gravity point G' or one of its vertices G (see Figure 4). Rotation is then accomplished by placing the stylus 38 on the crank handle 67 and moving it in a circular direction about the axle 65.

Capps may thus be considered to disclose a dragging element (hand crank icon 62) that is independent of content displayed on the user interface according to feature C and that is displayed at a predetermined position of said user interface according to feature D.

As a first remark, a person of ordinary skill in the art easily notices that Tsai is related to rotation of user interfaces in their entirety, i.e. all contents displayed are rotated, whereas Capps is only related to rotation/scaling of single objects (such as arrow 56 in Figure 4) within a user interface. This fundamental difference in their respective objectives would strongly inhibit a person of ordinary skill in the art to combine Tsai and Capps.

Nevertheless, even when hypothetically combining the disclosure of Tsai and Capps, a person of ordinary skill in the art would not arrive at the subject-matter of the amended independent claims.

This is at least due to the fact that feature D can only be arguably mapped to the hand crank icon 62 of Capps because the previously submitted independent claims (prior to amendment herein) did not specify how the predetermined position at which the dragging element is to be displayed and the course of motion that triggers the change of the orientation of the user interface are interrelated. This potential lack of clarity has now been removed by introducing feature E into the amended independent claims. Feature E explicitly requires that the course of motion comprises dragging the dragging element from the predetermined position at which the dragging element is displayed to another position of the user interface.

Feature E clarifies that the subject-matter of the amended independent claims cannot simply be obtained by introducing, into a device shown in Figures 2A-2C of Tsai, a hand crank icon 62 that is displayed (for instance upon selection of a toolbox icon) at a predetermined position and can then, after movement of the hand crank icon to a starting

position of a dragging path (e.g. position P1 shown in Figures 2A and 2B), be used to perform a course of motion that triggers a change of an orientation of the display.

This conclusion is due to the fact that feature E requires that the course of motion comprises dragging a dragging element from said predetermined position at which the dragging element is displayed to another position of the user interface, i.e. the starting point of the course of motion is the predetermined position at which the dragging element is displayed.

This feature is not anticipated or suggested by Tsai and/or Capps at all.

In particular, it is noted that feature E is apparently incompatible with both methods for rotating user interfaces or parts thereof according to Tsai and Capps.

With respect to Tsai, having a starting position of the course of motion at a predetermined position (i.e. the position where the dragging element is displayed) contradicts the concept of Tsai that a user may freely perform the course of motion with arbitrary starting and ending positions.

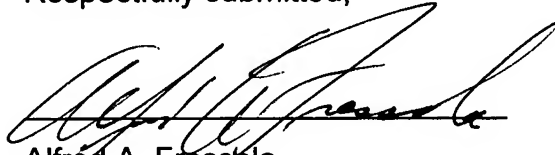
With respect to Capps, requiring that the course of motion starts with the predetermined position in toolbox 61 at which the hand crank unit 62 is displayed is entirely incompatible with the concept of Capps that the hand crank unit 62 has to be moved out of toolbox 61 and positioned with its axle 65 on a position G or G' (see Figure 4 of Capps) before performing the course of motion to trigger rotation of an object can start.

The amended independent claims 1, 15, and 26 are thus distinguished over the cited art. The numerous advantages achievable by the subject-matter of the amended independent claims have already been explained above and illustrate that the amended independent claims protect a particularly useful and advantageous concept that is substantially different from what is already known in the art.

Dependent claims 2-4, 6, 9-12, 14, 16-20, 23-25, and 33-40 are also distinguished over Tsai in view of Capps at least in view of their ultimate dependency from an independent claim which is believed to be allowable.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', written over a horizontal line.

Alfred A. Fressola
Attorney for Applicant
Reg. No. 27,550

Dated: July 22, 2009

WARE, FRESSOLA, VAN DER SLUYS
& ADOLPHSON LLP
Bradford Green, Building Five
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955